PENDING CLAIMS IN APPLICATION

48. (Amended) An image display system comprising:

(a) at least one complementary screen of one of light emitting or light source modulating devices in a two dimensional array of N (a real number) pixels, from which raster elements comprising one or more pixels are generated;

(b) a raster multiplying system comprising a plurality of optically connected light dividing elements, each said element to divide a raster element of the complementary screen into parts to simultaneously form copies of the generated raster elements, with said copies of said raster elements to be used in forming corresponding raster elements in P blocks, each block generally comprising a two dimensional array of pixels;

(c) an array of controllable modulators to independently modulate each of the raster elements for each of said P blocks; and

(d) a surface on which N image blocks of total number of M pixels are formed and displayed, where the number M exceeds the number N and where said surface preceding components of (a), (b) and (c) are placed in the mentioned order of the light path of the complementary screen.

49. (Not Amended) A system as in claim 48, comprising a plurality of modulators for each of said P blocks.

50. (Amended) A system as in claim 48, comprising a plurality of said complementary screens.

52. (Not Amended) A system as in claim 48 wherein a lens raster matrix forms said raster multiplying system.

55. (Amended) A system as in claim 71 further comprising a plurality of said complementary screens.

56. (Not Amended) A system as in claim 71 further comprising means for optic compression of generated raster elements for increasing the dot per inch resolution of a scanning light beam.

57. (Amended) A method for forming an image on an image display surface by forming a plurality of constituent blocks of said image, so that the image is presented as comprised of a plurality of blocks, comprising the steps of:

(a) providing at least one complementary screen having a two dimensional array of N pixels from which raster elements of one or more pixels are

generated with one or more of said raster elements to comprise a block of an image;

(b) using a raster multiplying system comprising a plurality of light dividing elements for dividing incoming light beam into parts, with said light dividing elements to separate a raster element corresponding light beam into a plurality of beam components to simultaneously form copies of each said generated raster element with said copies of said raster elements forming corresponding raster elements in P blocks, said P blocks together comprising M pixels each block generally comprising a two dimensional array of pixels;

(c) transmitting the formed beam components to an array of controllable modulators to independently modulate each raster element copy in accordance with control signals applied for each of said P blocks; and

(d) repeating the procedure successively generating other raster elements from said complementary screen with said elements to simultaneously form a modulated raster in said blocks; and

(e) displaying N formed blocks on an image display surface, where M is greater than N.

58. (Amended) A method as in claim 57 further comprising the step of using a plurality of complementary screens.

59. (Not Amended) A method as in claim 57 wherein a raster element

comprises more than one pixel.

60. (Not Amended) A method as in claim 59, further comprising the step of subjecting a generated raster element to additional optical compression for increasing dot per inch resolution of a sensitive plane scanning beam.

61. (Not Amended) A method as in claim 57 wherein a raster element is of the size of only one pixel.

63. (Not Amended) A method as in claim 57 comprising the use of lens raster matrix instead of said plurality of light dividing elements.

67. (Not Amended) A method as in claim 73 wherein a raster element comprises a plurality of pixels.

68. (Not Amended) A method as in claim 73 wherein a said raster element comprises any one pixel.

69. (Amended) A 3D holographic image display system comprising:

(a) at least one complementary screen of one of light emitting or light source modulating devices in a two dimensional array of N (a real number) pixels, from

which raster elements comprising one or more pixels are generated;

(b) a raster multiplying system comprising a plurality of passive and at least partly light transmitting elements to simultaneously form copies of said generated raster elements of a complementary screen, with said raster element copies forming corresponding raster elements in P blocks with each block generally comprising a two dimensional array of pixels;

(c) an array of controllable modulators to independently modulate each of the raster elements for each of said P blocks;

(d) a surface on which a hologram blocks of total number of M pixels are formed, where the number M exceeds number N and where said surface preceding components of (a), (b) and (c) are placed in the mentioned order of the light path of the complementary screen; and

(e) a holograph generator for producing a 3D holographic image from said surface.

71. (Amended) A system as in claim 48 used for image recording further comprising:

(e) a photosensitive plane on which an outer image to be recorded is produced, said outer image comprising a plurality of said blocks, each block being of a two dimensional array of pixels, and all said blocks comprising M pixels, where number M exceeds number N, and where said system components of (a), (b) and (c) are placed in

the mentioned order of the light path of the complementary screen; and

(f) means to scan said outer image on said photosensitive plane into electric signals for recording.

73. (Amended) A method as in claim 57 used for image recording wherein said image display surface of step (e) comprises a photosensitive plane on which an outer image is produced and further comprising that the step of point (b) is followed by:

(f) converting the image information received on said plane by the projection of said beam components into P electric signals, one signal for one of said P blocks, for recording received information for P separate image elements; and

(g) repeating the procedure by successively generating other raster elements on said complementary screen, to simultaneously scan each of P blocks.

75. (Not Amended) A method as in claim 57 further comprising generating 3D image from said image display surface.

76. (Not Amended) A method as in claim 57 further comprising the step of subjecting raster elements of complementary screen to additional optical compression for increasing dot per inch resolution.

77. (Not Amended) A system as in claim 48 further comprising means

for optic compression of complementary screen raster elements for increasing the dot per inch resolution.

78. (Not Amended) A system as in claim 48 further comprising partly transparent mirrors as light dividing elements.

79. A system as in claim 69 wherein an array of light dividing elements forms said raster multiplying system.